a second capacitive element disposed between the output of the first winding and the output of the second winding, wherein the first capacitive element and the second capacitive element ~~having capacitances that are selected based upon an~~ each have capacitance values that are at least four times the inter-winding capacitance value between the first winding and the second winding to permit passage of DSL signals across the load coil.

2. (Currently Amended) The load coil of claim 1, wherein the first and second capacitive elements each have a capacitance value in the range of 10 nF to 82 nF.

3. (Currently Amended) The load coil of claim 1, wherein the first and second capacitive elements each have a capacitance value in the range of 5 nF to 50 nF.

4. (Original) The load coil of claim 1, wherein the coupled inductor has an inductance of about 66 mH.

5. (Previously amended) The load coil of claim 1, wherein the first and second capacitive elements increase an effective inter-winding capacitance of the first and second windings by at least a factor of 5.

6. (Currently Amended) A load coil for insertion along a local loop, the load coil comprising:

a coupled inductor having first and second windings wrapped about an inductor core, each winding having an input and an output, the coupled inductor configured to improve transmission of POTS-band signals across the local loop;

a first capacitive element disposed in parallel with the first winding; and

a second capacitive element disposed in parallel with the second winding, wherein the first capacitive element and the second capacitive element ~~having capacitances that are selected based upon~~ have capacitance values relative to an intra-winding capacitance value of either the first winding or the second winding to permit passage of DSL signals across the load coil ~~with low attenuation~~.

7. (Currently Amended) The load coil of claim 6, wherein the first and second capacitive elements each have a capacitance value in the range of 5 nF to 50 nF.

8. (Currently Amended) The load coil of claim 6, wherein the first and second capacitive elements each have a capacitance value in the range of 10 to 82 nF.

9. (Original) The load coil of claim 6, wherein the coupled inductor has an inductance of about 66 mH.

10. (Currently Amended) The load coil of claim 6, wherein the first and second windings each have an intra-winding capacitance value and the first and second ~~capacitances~~ capacitance values increase the effective intra-winding capacitance values of the first and second windings by at least a factor of 120.

11. (Currently Amended) A system for transmitting DSL and POTS signals over a local loop, the system comprising:

a first load coil for disposal along the local loop to condition the POTS signals, the first load coil including a coupled inductor and multiple capacitive elements for increasing an effective capacitance of the coupled inductor ~~to improve transmission of DSL signals across the first load coil~~, wherein the multiple capacitive elements ~~having capacitances that are selected based upon~~ have capacitance values relative to a capacitance value of the coupled inductor to improve transmission of DSL signals across the first load coil; and

a first DSL signal repeater for disposal along the local loop in series with the first load coil to amplify the DSL signals, the first DSL signal repeater including a second load coil for conditioning POTS signals passing therethrough.

12. (Original) The system for transmitting DSL and POTS signals according to claim 11, wherein the coupled inductor has first and second windings wrapped about an inductor core, each winding having an input and an output, the multiple capacitive elements further comprising:

a first capacitive element being disposed between the input of the first winding and the input of the second winding; and

a second capacitive element disposed between the output of the first winding and the output of the second winding.

13. (Original) The system for transmitting DSL and POTS signals according to claim 11, wherein the coupled inductor has first and second windings wrapped about an inductor core, the multiple capacitive elements further comprising:

a first capacitive element disposed in parallel with the first winding; and

a second capacitive element disposed in parallel with the second winding.

14. (Currently Amended) The system for transmitting DSL and POTS signals according to claim 11, wherein each capacitive element has a capacitance value between 10 nF – 82 nF.

15. (Currently Amended) The system for transmitting DSL and POTS signals according to claim 11, wherein each capacitive element has a capacitance value between 5 nF – 50 nF.

16. (Currently Amended) A load coil coupled to a local loop for improving simultaneous transmission of POTS and DSL signals across the local loop in any direction, the load coil comprising:

inductive means for conditioning the POTS signals as they traverse the local loop; and

capacitive means having ~~capacitances based upon~~ a capacitance value that is at least four times a capacitance value of the inductive means, the capacitive means coupled to the inductive means for permitting the DSL signals to pass across the load coil.

17. (Currently amended) A system for transmitting DSL and POTS signals over a local loop, the system comprising:

load coil means positioned along the local loop, the load coil means comprising inductive means for conditioning POTS signals as they traverse the local loop and capacitive means having ~~capacitances based upon~~ capacitance values relative to a capacitance value of the inductive means coupled to the inductive means for facilitating passage of DSL signals across the load coil; and

DSL signal amplification means positioned along the local loop for amplifying DSL signals as they traverse the local loop.

18. (Currently Amended) A method for improving simultaneous transmission of POTS-band signals and DSL signals across a local loop, comprising the steps of:

inductively coupling a first segment of the local loop to a second segment of the local loop via a coupled inductor to condition the POTS-band signals traversing the local loop; and

capacitively coupling the first segment of the local loop to the second segment of the local loop via capacitive elements to pass the DSL signals traversing the local loop with low attenuation, the capacitive elements having ~~capacitances~~ capacitance values that are selected based upon a capacitance value of the coupled inductor.

19. (Original) The method of claim 18, wherein the step of inductively coupling includes coupling a first wire of the first segment of the local loop to a first wire of the second segment of the local loop via a first inductor winding wrapped about an inductor core, and coupling a second wire of the first segment of the local loop to a second wire of the second segment of the local loop via a second inductor winding wrapped about the inductor core.

20. (Original) The method of claim 18, wherein the step of capacitively coupling includes coupling a first wire of the first segment of the local loop to a second wire of the second segment of the local loop via a first capacitive element, and coupling a second wire of the first segment of the local loop to a first wire of the second segment of the local loop via a second capacitive element.

21. (Original) The method of claim 18, wherein the step of capacitively coupling includes coupling a first wire of the first segment of the local loop to a first wire of the second segment of the local loop via a first capacitive element, and coupling a second wire of the first segment of the local loop to a second wire of the second segment of the local loop via a second capacitive element.

22. (Currently Amended) A system to improve simultaneous transmission of POTS-band signals and DSL signals across a local loop, the system comprising:

a first local loop, the first local loop including

a first wire, and

a second wire;

a second local loop, the second local loop including

a third wire, and

a fourth wire;

a coupled inductor configured to condition the POTS-band signals traversing the first and second local loops, the coupled inductor including

an inductor core,

a first inductor winding wrapped about the inductor core and coupling the first wire to the third wire, and

a second inductor winding wrapped about the inductor core and coupling the second wire to the fourth wire; and

capacitive elements configured to pass the DSL signals traversing the first and second local loops, the capacitive elements including

a first capacitor coupling the first wire to the fourth wire, and

a second capacitor coupling the second wire to the third wire, wherein the first capacitor and the second capacitor ~~having capacitances that are selected based upon~~ have capacitance values that are at least four times an inter-winding capacitance value between the first inductor winding and the second inductor winding.

23. (Currently Amended) A system to improve simultaneous transmission of POTS-band signals and DSL signals across a local loop, the system comprising:

a first local loop, the first local loop including

a first wire, and

a second wire;

a second local loop, the second local loop including

a third wire, and

a fourth wire;

a coupled inductor configured to condition the POTS-band signals traversing the first and second local loops, the coupled inductor including

an inductor core,

a first inductor winding wrapped about the inductor core and coupling the first wire to the third wire, and

a second inductor winding wrapped about the inductor core and coupling the second wire to the fourth wire; and

capacitive elements configured to pass the DSL signals traversing the first and second local loops, the capacitive elements including

a first capacitor coupling the first wire to the third wire, and

a second capacitor coupling the second wire to the fourth wire, wherein the first capacitor and the second capacitor ~~having capacitances that are selected based upon~~ have capacitance values relative to an intra-winding capacitance value of either the first inductor winding or the second inductor winding.

24. (Currently Amended) The load coil of claim 1, wherein the first and second capacitive elements each have a capacitance value at least five times the inter-winding capacitance value between the first winding and the second winding.

25. (Currently Amended) The load coil of claim 6, wherein the first and second capacitive elements each have a capacitance value at least one hundred and twenty times the intra-winding capacitance value of either the first winding or the second winding.